

Claims

What is claimed is:

1. A beverage supply system comprising:

a beverage container having a bottom outlet;

a first reservoir connected to the beverage container bottom outlet to receive beverage

5 from the beverage container under force of gravity;

a pump connected to the first reservoir;

a second reservoir connected to the pump, the second reservoir defining an expandable beverage chamber, receiving beverage pumped from the first reservoir only when a first quantity of beverage in the first reservoir is within a first quantity range and a second quantity of beverage
10 in the second reservoir is below a second quantity range; and

an external supply port connected between the first reservoir and the pump.

2. The supply system of claim 1, wherein the pump is deactivated if either the first

quantity of beverage in the first reservoir is below the first quantity range or the second quantity of beverage in the second reservoir is above the second quantity range.

3. The supply system of claim 1, wherein the second reservoir comprises a tank

containing the second quantity of beverage in the second reservoir and a solid barrier within the tank that presses against the second quantity of beverage in the second reservoir, the barrier and
5 the tank defining the beverage chamber.

4. The supply system of claim 3, wherein the second quantity of beverage displaces the

barrier as the second quantity of beverage in the second reservoir increases.

5. The supply system of claim 4, wherein the barrier is a flexible diaphragm within the tank.

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6. The supply system of claim 3, wherein the barrier increases a pressure within the
5 beverage chamber in the second reservoir as the second quantity of beverage in the second reservoir increases.

7. The supply system of claim 6, further comprising a pressure switch responsive to the pressure within the beverage chamber and operative to deactivate the pump when the second quantity of beverage is above the second quantity range.

8. The supply system of claim 7, further comprising a fluid level switch within the first reservoir, the fluid level switch operative in response to a beverage level in the first reservoir.

9. The supply system of claim 1, wherein the pump, the first reservoir, and the second reservoir are positioned in an enclosed space defined by a housing that supports the beverage container.

10. The supply system of claim 9, wherein the housing comprises a unitary member.

11. The supply system of claim 10, wherein the unitary member comprises a polymer material.

12. The supply system of claim 11, wherein the housing includes a door selectively providing access to the enclosed space, the door comprising the polymer material.

13. The supply system of claim 1, further including an indicator light that indicates when the first quantity of beverage within the first reservoir is below the first quantity range.

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14. A beverage supply system comprising:

5 a first reservoir adapted to receive beverage from a beverage container under force of gravity;

a pump connected to the first reservoir;

an external port connected to the pump for supplying beverage to the pump; and

10 a second reservoir connected to the pump, the second reservoir comprising a solid barrier adapted to press against a second quantity of beverage within the second reservoir as the second quantity of beverage within the second reservoir displaces the barrier to produce a pressure within the second quantity of beverage within the second reservoir; and

15 wherein the second reservoir is adapted to supply beverage to a beverage dispenser without the pump being operated; and

wherein the pump is activated to pump beverage either from the first reservoir to the second reservoir when a first quantity of beverage in the first reservoir is within a first quantity range and the second quantity of beverage in the second reservoir is below a second quantity range or from the external port if beverage is available through the external port.

15. The supply system of claim 14, wherein the pump is deactivated if either the first quantity of beverage in the first reservoir is below the first quantity range or the second quantity of beverage in the second reservoir is above the second quantity range when beverage is 5 unavailable through the external port.

16. The supply system of claim 14, wherein the second reservoir comprises a tank and the barrier is secured within the tank.

17. The supply system of claim 16, wherein the barrier is a flexible diaphragm.

18. The supply system of claim 17, wherein the barrier increases the pressure within the second quantity of beverage in the second reservoir as the second quantity of beverage in the second reservoir increases.

19. The supply system of claim 18, further comprising a pressure switch responsive to the pressure within the second quantity of beverage in the second reservoir and operative to

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deactivate the pump when the second quantity of beverage in the second reservoir is above the
5 second quantity range.

20. The supply system of claim 14, wherein the pump, the first reservoir, and the second reservoir are positioned in an enclosed space defined by a housing that supports the beverage container.

21. The supply system of claim 20, wherein the housing comprises a unitary polymer member defining the enclosed space and a door spanning an opening in the unitary polymer member.

22. The supply system of claim 14, further including an indicator light that indicates when the first quantity of beverage within the first reservoir is below the first quantity range.